September 19, 2003

Mr. Ron Wedel
Pyramid Excavation and Construction, Inc
402 North Liberty Street
Bremen, IN 46506

Re: Minor Source Operating Permit
No.: 099-17158-05235

Dear Mr. Wedel:

On April 10, 2003, the Office of Air Quality (OAQ) received a permit application for a portable stone crusher and screening operation, located at 402 North Liberty Street, Bremen, Indiana 46506. Based on the data and information submitted in the application, this Minor Source Operating Permit is hereby approved for the following:

This portable source is approved to operate the following emissions units and pollution control devices:

(a) One (1) Pegson Crusher Unit for asphalt and concrete crushing including one (1) Hopper/Shaker, one (1) Crusher and one (1) Grizzley. identified as C-1, with a maximum capacity of 200 tons per hour, using water spray as control.

(b) One (1) Powerscreen Screen Unit for asphalt and concrete screening including three (3) Shaker Screens numbers 1, 2 and 3 each with a 1.5 inch mesh screen.

(c) One (1) Unfragmented concrete and one (1) unfragmented asphalt outside storage pile of 5,000 tons each.

(d) Two (2) 0.572 MMBtu per hour diesel fueled engines for a total of 1.144 MMBtu per hour.

Questions or comments about the enclosed documents should be directed to Walter Habeeb, OAQ, 100 North Senate Avenue, P.O. Box 6015, Indianapolis, Indiana, 46206-6015, or call (317) 232-8422.

Original Signed by Paul Dubenetzky
Paul Dubenetzky, Chief
Permits Branch
Office of Air Quality

WVH
cc: File - Marshall County
Air Compliance Section - Rick Reynolds
NWRO
ENVIROCORP
Mr. Richard Brown
51728 S.R. 933
South Bend, Indiana 46637-1706

MINOR SOURCE OPERATING PERMIT
OFFICE OF AIR QUALITY

Pyramid Excavation and Construction, Inc.
520 North Keyser Drive
Bremen, Indiana 46506

(herein known as the Permittee) is hereby authorized to construct and operate subject to the conditions contained herein, the emission units described in Section A (Source Summary) of this permit.

This permit is issued to the above mentioned company under the provisions of 326 IAC 2-1.1, 326 IAC 2-5.1, 326 IAC 2-6.1 and 40 CFR 52.780, with conditions listed on the attached pages.

Operation Permit No.: MSOP 099-17158-05235	
Issued by: Original Signed by Paul Dubenetzky Paul Dubenetzky, Branch Chief Office of Air Quality	Issuance Date: September 19, 2003

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SECTION A SOURCE SUMMARY

This permit is based on information requested by the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ). The information describing the source contained in conditions A.1 through A.2 is descriptive information and does not constitute enforceable conditions. However, the Permittee should be aware that a physical change or a change in the method of operation that may render this descriptive information obsolete or inaccurate may trigger requirements for the Permittee to obtain additional permits or seek modification of this permit pursuant to 326 IAC 2, or change other applicable requirements presented in the permit application.

A.1 General Information [326 IAC 2-5.1-3(c)] [326 IAC 2-6.1-4(a)]

The Permittee owns and operates a portable concrete and asphalt crushing plant

Authorized Individual:	Ron Wedel (President)
Source Address:	501 North Keyser Drive, Bremen, Indiana, 46506
Mailing Address:	402 North Liberity Street, Bremen, Indiana, 46506
General Source Phone:	574-546-5176
SIC Code:	1611
County Location:	Marshall
Source Location Status:	Attainment for all criteria pollutants
Source Status:	Minor Source Operating Permit

A.2 Emissions Units and Pollution Control Equipment Summary

This portable source is approved to operate the following emissions units and pollution control devices:

(a) One (1) Pegson Crusher Unit for asphalt and concrete crushing including one (1) Hopper/Shaker, one (1) Crusher and one (1) Grizzley. identified as C-1, with a maximum capacity of 200 tons per hour, using water spray as control.

(b) One (1) Powerscreen Screen Unit for asphalt and concrete screening including three (3) Shaker Screens numbers 1, 2 and 3 each with a 1.5 inch mesh screen.

(c) One (1) Unfragmented concrete and one (1) unfragmented asphalt outside storage pile of 5,000 tons each.

(d) Two (2) 0.572 MMBtu per hour diesel fueled engines for a total of 1.144 MMBtu per hour.

SECTION B GENERAL CONDITIONS

THIS SECTION OF THE PERMIT IS BEING ISSUED UNDER THE PROVISIONS OF 326 IAC 2-1.1 AND 40 CFR 52.780, WITH CONDITIONS LISTED BELOW.

B.1 Permit No Defense [IC 13]

This permit to operate does not relieve the Permittee of the responsibility to comply with the provisions of the Indiana Environmental Management Law (IC 13-11 through 13-20; 13-22 through 13-25; and 13-30), the Air Pollution Control Law (IC 13-17) and the rules promulgated thereunder, as well as other applicable local, state, and federal requirements.

B.2 Definitions

Terms in this permit shall have the definition assigned to such terms in the referenced regulation. In the absence of definitions in the referenced regulation, the applicable definitions found in the statutes or regulations IC 13-11, 326 IAC 1-2, and 326 IAC 2-1.1-1 shall prevail.

B.3 Effective Date of the Permit [IC13-15-5-3]

Pursuant to IC 13-15-5-3, this permit becomes effective upon its issuance.

B.4 Permit Term and Renewal [326 IAC 2-6.1-7(a)][326 IAC 2-1.1-9.5]

This permit is issued for a fixed term of five (5) years from the issuance date of this permit, as determined in accordance with IC 4-21.5-3-5(f) and IC 13-15-5-3. Subsequent revisions of this permit do not affect the expiration date.

The Permittee shall apply for an operation permit renewal at least ninety (90) days prior to the expiration date. If a timely and sufficient permit application for a renewal has been made, this permit shall not expire and all terms and conditions shall continue in effect until the renewal permit has been issued or denied.

B.5 Annual Notification [326 IAC 2-6.1-5(a)(5)]

(a) Annual notification shall be submitted to the Office of Air Quality stating whether or not the source is in operation and in compliance with the terms and conditions contained in this permit.

(b) Noncompliance with any condition must be specifically identified. If there are any permit conditions or requirements for which the source is not in compliance at any time during the year, the Permittee must provide a narrative description of how the source did or will achieve compliance and the date compliance was, or will be, achieved. The notification must be signed by an authorized individual.

(c) The annual notice shall cover the time period from January 1 to December 31 of the previous year, and shall be submitted in the format attached no later than March 1 of each year to:

Compliance Branch, Office of Air Quality
Indiana Department of Environmental Management
100 North Senate Avenue, P.O. Box 6015
Indianapolis, IN 46206-6015

(d) The notification shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, on or before the date it is due.

B.6 Preventive Maintenance Plan [326 IAC 1-6-3]

(a) If required by specific condition(s) in Section D of this permit, the Permittee shall prepare and maintain Preventive Maintenance Plans (PMPs) within ninety (90) days after issuance of this permit, including the following information on each emissions unit:

(1) Identification of the individual(s) responsible for inspecting, maintaining, and repairing emission control devices;

(2) A description of the items or conditions that will be inspected and the inspection schedule for said items or conditions; and

(3) Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.

If, due to circumstances beyond the Permittee's control, the PMPs cannot be prepared and maintained within the above time frame, the Permittee may extend the date an additional ninety (90) days provided the Permittee notifies:

Indiana Department of Environmental Management
Compliance Branch, Office of Air Quality
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

The PMP extension notification does not require the certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

(b) The Permittee shall implement the PMPs, including any required record keeping, as necessary to ensure that failure to implement a PMP does not cause or contribute to an exceedance of any limitation on emissions or potential to emit.

(c) A copy of the PMP's shall be submitted to IDEM, OAQ, upon request and within a reasonable time, and shall be subject to review and approval by IDEM, OAQ. IDEM, OAQ, may require the Permittee to revise its PMP whenever lack of proper maintenance causes or is the primary contributor to an exceedance of any limitation on emissions or potential to emit. The PMP does not require the certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

(d) To the extent the Permittee is required by 40 CFR Part 60/63 to have an Operation, Maintenance, and Monitoring (OMM) Plan for a unit, such Plan is deemed to satisfy the PMP requirements of 326 IAC 1-6-3 for that unit.

B.7 Permit Revision [326 IAC 2-5.1-3(e)(3)] [326 IAC 2-6.1-6]

(a) Permit revisions are governed by the requirements of 326 IAC 2-6.1-6.

(b) Any application requesting an amendment or modification of this permit shall be submitted to:

Indiana Department of Environmental Management
Permits Branch, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

Any such application shall be certified by an "authorized individual" as defined by 326 IAC 2-1.1-1.

(c) The Permittee shall notify the OAQ within thirty (30) calendar days of implementing a notice-only change. [326 IAC 2-6.1-6(d)]

(d) No permit amendment or modification is required for the addition, operation or removal of a nonroad engine, as defined in 40 CFR 89.2.

B.8 Inspection and Entry [326 IAC 2-5.1-3(e)(4)(B)] [326 IAC 2-6.1-5(a)(4)][IC 13-14-2-2] [IC 13-30-3-1]

Upon presentation of proper identification cards, credentials, and other documents as may be required by law, and subject to the Permittee's right under all applicable laws and regulations to assert that the information collected by the agency is confidential and entitled to be treated as such, the Permittee shall allow IDEM, OAQ, U.S. EPA, or an authorized representative to perform the following:

(a) Enter upon the Permittee's premises where a permitted source is located, or emissions related activity is conducted, or where records must be kept under the conditions of this permit;

(b) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, have access to and copy, at reasonable times, any records that must be kept under this title or the conditions of this permit or any operating permit revisions;

(c) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, inspect, at reasonable times, any processes, emissions units (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit or any operating permit revisions;

(d) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, sample or monitor, at reasonable times, substances or parameters for the purpose of assuring compliance with this permit or applicable requirements; and

(e) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, utilize any photographic, recording, testing, monitoring, or other equipment for the purpose of assuring compliance with this permit or applicable requirements.

B.9 Transfer of Ownership or Operation [326 IAC 2-6.1-6(d)(3)]

Pursuant to [326 IAC 2-6.1-6(d)(3)] :

(a) In the event that ownership of this source is changed, the Permittee shall notify IDEM, OAQ, Permits Branch, within thirty (30) days of the change.

(b) The written notification shall be sufficient to transfer the permit to the new owner by an notice-only change pursuant to 326 IAC 2-6.1-6(d)(3).

(c) IDEM, OAQ, shall issue a revised permit.

The notification which shall be submitted by the Permittee does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1.

B.10 Annual Fee Payment [326 IAC 2-1.1-7]

(a) The Permittee shall pay annual fees to IDEM, OAQ within thirty (30) calendar days of receipt of a billing.

(b) The Permittee may call the following telephone numbers: 1-800-451-6027 or 317-233-4230 (ask for OAQ, I/M & Billing Section), to determine the appropriate permit fee.

SECTION C SOURCE OPERATION CONDITIONS

Entire Source

C.1 Particulate Emission Limitations For Processes with Process Weight Rates Less Than One Hundred (100) pounds per hour [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2(e)(2), particulate emissions from any process not exempt under 326 IAC 6-3-1(b) or (c) which has a maximum process weight rate less than 100 pounds per hour and the methods in 326 IAC 6-3-2(b) through (d) do not apply shall not exceed 0.551 pounds per hour.

C.2 Permit Revocation [326 IAC 2-1.1-9]

Pursuant to 326 IAC 2-1.1-9 (Revocation of Permits), this permit operate may be revoked for any of the following causes:

(a) Violation of any conditions of this permit.

(b) Failure to disclose all the relevant facts, or misrepresentation in obtaining this permit.

(c) Changes in regulatory requirements that mandate either a temporary or permanent reduction of discharge of contaminants. However, the amendment of appropriate sections of this permit shall not require revocation of this permit.

(d) Noncompliance with orders issued pursuant to 326 IAC 1-5 (Episode Alert Levels) to reduce emissions during an air pollution episode.

(e) For any cause which establishes in the judgment of IDEM, the fact that continuance of this permit is not consistent with purposes of this article.

C.3 Opacity [326 IAC 5-1]

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Alternative Opacity Limitations), opacity shall meet the following, unless otherwise stated in this permit:

(a) Opacity shall not exceed an average of forty percent (40%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.

(b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

C.4 Fugitive Dust Emissions [326 IAC 6-4]

The Permittee shall not allow fugitive dust to escape beyond the property line or boundaries of the property, right-of-way, or easement on which the source is located, in a manner that would violate 326 IAC 6-4 (Fugitive Dust Emissions).

C.5 Asbestos Abatement Projects [326 IAC 14-10] [326 IAC 18] [40 CFR 61, Subpart M]

The Permittee shall comply with the applicable requirements of 326 IAC 14-10, 326 IAC 18, and 40 CFR 61.140.

Testing Requirements

C.6 Performance Testing [326 IAC 3-6]

(a) Compliance testing on new emissions units shall be conducted within 60 days after achieving maximum production rate, but no later than180 days after initial start-up, if specified in Section D of this approval. All testing shall be performed according to the provisions of 326 IAC 3-6 (Source Sampling Procedures), except as provided elsewhere in this permit, utilizing any applicable procedures and analysis methods specified in 40 CFR 51, 40 CFR 60, 40 CFR 61, 40 CFR 63, 40 CFR 75, or other procedures approved by IDEM, OAQ.

A test protocol, except as provided elsewhere in this permit, shall be submitted to:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Quality
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

no later than thirty-five (35) days prior to the intended test date.

(b) The Permittee shall notify IDEM, OAQ of the actual test date at least fourteen (14 days) prior to the actual date.

(c) Pursuant to 326 IAC 3-6-4(b), all test reports must be received by IDEM, OAQ not later than forty-five (45) days after the completion of the testing. An extension may be granted by the IDEM, OAQ, if the source submits to IDEM, OAQ, a reasonable written explanation not later than five (5) days prior to the end of the initial forty-five (45) day period.

Compliance Requirements [326 IAC 2-1.1-11]

C.7 Compliance Requirements [326 IAC 2-1.1-11]

The commissioner may require stack testing, monitoring, or reporting at any time to assure compliance with all applicable requirements by issuing an order under 326 IAC 2-1.1-11. Any monitoring or testing shall be performed in accordance with 326 IAC 3 or other methods approved by the commissioner or the U.S. EPA.

Compliance Monitoring Requirements

C.8 Monitoring Methods [326 IAC 3][40 CFR 60][40 CFR 63]

Any monitoring or testing required by Section D of this permit shall be performed according to the provisions of 326 IAC 3, 40 CFR 60, Appendix A, 40 CFR 60, Appendix B, 40 CFR 63, or other approved methods as specified in this permit.

Record Keeping and Reporting Requirements

C.9 Malfunctions Report [326 IAC 1-6-2]

Pursuant to 326 IAC 1-6-2 (Records; Notice of Malfunction):

(a) A record of all malfunctions, including startups or shutdowns of any facility or emission control equipment, which result in violations of applicable air pollution control regulations or applicable emission limitations shall be kept and retained for a period of three (3) years and shall be made available to the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ) or appointed representative upon request.

(b) When a malfunction of any facility or emission control equipment occurs which lasts more than one (1) hour, said condition shall be reported to OAQ, using the Malfunction Report Forms (2 pages). Notification shall be made by telephone or facsimile, as soon as practicable, but in no event later than four (4) daytime business hours after the beginning of said occurrence.

(c) Failure to report a malfunction of any emission control equipment shall constitute a violation of 326 IAC 1-6, and any other applicable rules. Information of the scope and expected duration of the malfunction shall be provided, including the items specified in 326 IAC 1-6-2(a)(1) through (6).

(d) Malfunction is defined as any sudden, unavoidable failure of any air pollution control equipment, process, or combustion or process equipment to operate in a normal and usual manner. [326 IAC 1-2-39]

C.10 General Record Keeping Requirements [326 IAC 2-6.1-5]

(a) Records of all required monitoring data, reports and support information required by this permit shall be retained for a period of at least five (5) years from the date of monitoring sample, measurement, report, or application. These records shall be physically present or electronically accessible at the source location for a minimum of three (3) years. The records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the Commissioner makes a request for records to the Permittee, the Permittee shall furnish the records to the Commissioner within a reasonable time.

(b) Unless otherwise specified in this permit, all record keeping requirements not already legally required shall be implemented when operation begins.

C.11 General Reporting Requirements [326 IAC 2-1.1-11] [326 IAC 2-6.1-2] [IC 13-14-1-13]

(a) Reports required by conditions in Section D of this permit shall be submitted to:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Quality
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

(b) Unless otherwise specified in this permit, any notice, report, or other submission required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, on or before the date it is due.

(c) Unless otherwise specified in this permit, any quarterly or semi-annual report required in Section D of this permit shall be submitted within thirty (30) days of the end of the reporting period. The report does not require the certification by an “authorized individual” as defined by 326 IAC 2-1.1-1(1).

(d) The first report shall cover the period commencing on the date of issuance of this permit and ending on the last day of the reporting period. Reporting periods are based on calendar years.

Portable Source Requirement

C.12 Relocation of Portable Sources [326 IAC 2-14-4]

(a) This permit is approved for operation in all areas of Indiana except in severe nonattainment areas for ozone (at the time of this permit's issuance these areas were Lake and Porter Counties). This determination is based on the requirements of Prevention of Significant Deterioration in 326 IAC 2-2, and Emission Offset requirements in 326 IAC 2-3. Prior to locating in any severe nonattainment area, the Permittee must submit a request and obtain a permit modification.

(b) A request to relocate shall be submitted to IDEM, OAQ at least thirty (30) days prior to the intended date of relocation. This submittal shall include the following:

(1) A list of governmental officials entitled to receive notice of application to relocate. IC 13-15-3-1

(2) A list of adjacent landowners that the Permittee will send written notice to not more than ten (10) days after submission of the request to relocate. IC 13-15-8

The notification by the Permittee does require the certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

(c) A "Relocation Site Approval" letter shall be obtained prior to relocating.

(d) The Permittee shall also notify the applicable local air pollution control agency when relocating to, or from, one the following:

(1) Madison County - (Anderson Office of Air Management)

(2) City of Evansville plus four (4) miles beyond the corporate limits but not outside Vanderburgh County - (Evansville EPA)

(3) City of Gary - (Gary Department of Environmental Affairs)

(4) City of Hammond - (Hammond Department of Environmental Management)

(5) Marion County - (Indianapolis Office of Environmental Services)

(6) St. Joseph County - (St. Joseph County Health Department)

(7) Vigo County - (Vigo County Air Pollution Control)

(e) A valid operation permit consists of this document and any subsequent "Relocation Site Approval" letter specifying the current location of the portable plant.

SECTION D.1 FACILITY OPERATION CONDITIONS

Facility Description:

(a) One (1) Pegson Crusher Unit for asphalt and concrete crushing including one (1) Hopper/Shaker, one (1) Crusher and one (1) Grizzley. identified as C-1, with a maximum capacity of 200 tons per hour, using water spray as control.

(b) One (1) Powerscreen Screen Unit for asphalt and concrete screening including three (3) Shaker Screens numbers 1, 2 and 3 each with a 1.5 inch mesh screen.

(c) One (1) Unfragmented concrete and one (1) unfragmented asphalt outside storage pile of 5,000 tons each.

(d) Two (2) 0.572 MMBtu per hour diesel fueled engines for a total of 1.144 MMBtu per hour.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards

D.1.1 Particulate [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the allowable particulate emission rate from the woodworking facilities shall not exceed 58.51 pounds per hour when operating at a process weight rate of 400,000 pounds per hour.

The pounds per hour limitation was calculated with the following equation:

Interpolation and extrapolation of the data for the process weight rate in excess of 60,000 pounds per hour shall be accomplished by use of the equation:

$E = 55.0\ P^{0.11} - 40$ where E = rate of emission in pounds per hour; and P = process weight rate in tons per hour

D.1.2 Preventive Maintenance Plan [326 IAC 1-6-3]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for this facility and its control device.

D.1.3 Opacity [326 IAC 12] [40 CFR 60.670, Subpart OOO]

Pursuant to New Source Performance Standards, 326 IAC 12 (40 CFR 60.670, Subpart OOO) "Standards of Performance for Nonmetallic Mineral Processing Plants" visible emissions shall comply with the following standards:

(a) The visible emissions from the screening and conveying operations shall not exceed an average of ten percent (10%) opacity in twenty-four (24) consecutive readings in a six (6) minute period. Compliance with this limitation shall be determined by 40 CFR 60, Appendix A, Method 9.

(b) The visible emissions from the crushing operation shall not exceed an average of fifteen percent (15%) opacity in twenty-four (24) consecutive readings in a six (6) minute period. Compliance with this limitation shall be determined by 40 CFR 60, Appendix A, Method 9.

D.1.4 SO_2 Emissions Limitation [326 IAC 7-1.1-2]

Sulfur Dioxide emissions from fuel combustion facilities shall be limited as follows, unless specified otherwise in 326 IAC 7-4.

Five-tenths (0.5) pound per million Btu for distillate oil combustion.

D.1.5 Fugitive Dust Emissions [326 IAC 6-4-2]

Emissions of fugitive dust from unpaved roads and the outside concrete and asphalt storage piles shall be limited to less than the following:

(a) A source or combination of sources which cause to exist fugitive dust concentrations greater than sixty-seven percent (67%) in excess of ambient upwind concentrations as determined by the following formula:

$P = 100(R-U)/U$ where P = Percentage increase
R = Number of particles of fugitive dust measured at the downward receptor site
U = Number of particles of fugitive dust measured at upwind of background site

(b) The fugitive dust is comprised of fifty percent (50%) or more respirable dust, then the percent increase of dust concentration in subdivision (1) of this section shall be modified as follows:

$P_R = (1.5 \pm N)*P$ where N = Fraction of fugitive dust that is respirable dust
PR = allowable percentage increase in dust concentration above backgrounds
P = no value greater that sixty-seven percent (67%)

(c) The ground level ambient air concentrations exceed fifty (50) micrograms per cubic meter above background concentrations for a sixty (60) minute period.

(d) If fugitive dust is visible crossing the boundary or property line of a source. This subdivision may be refuted by factual data expressed in subdivision (1), (2) or (3) of this section.

Compliance Determination Requirements

D.1.6 Dust Suppression for Crushing, Screening and Conveying Operations

The crushing, screening, and conveying operations shall be equipped with dust collectors, unless a wet process or continuous wet suppression system is used to comply with Conditions D.1.3(a) and D.1.3(b) of this operating agreement.

D.1.7 Testing Requirements [326 IAC 3-6] [40 CFR 60.670, Subpart OOO]

Pursuant to 326 IAC 2-1-3 (Construction and Operating Permit Requirements) compliance opacity tests shall be performed for crushing, screening and conveying facilities within 60 days after achieving maximum production rate, but no later than 180 days after initial start-up. These tests shall be performed according to 326 IAC 3-6 (Source Sampling Procedures) using the methods specified in the rule or as approved by the Commissioner.

(a) A test protocol shall be submitted to the OAQ, Compliance Data Section, 35 days in advance of the test.

(b) The Compliance Data Section shall be notified of the actual test date at least two (2) weeks prior to the date.

(c) All test reports must be received by the Compliance Data Section within 45 days of completion of the testing.

(d) Whenever the results of the stack test performed exceed the level specified in this permit, appropriate corrective actions shall be implemented within thirty (30) days of receipt of the test results. These actions shall be implemented immediately unless notified by OAQ that they are acceptable. The Permittee shall minimize emissions while the corrective actions are being implemented.

(e) Whenever the results of the stack test performed exceed the level specified in this permit, a second test to demonstrate compliance shall be performed within 120 days. Failure of the second test to demonstrate compliance may be grounds for immediate revocation of this permit to operate the affected facility.

Compliance Monitoring Requirements [326 IAC 2-5.1-3(e)(2)] [326 IAC 2-6.1-5(a)(2)]

D.1.8 Particulate Control

In order to comply with condition D.1.1, the water spray for particulate control shall be in operation and control emissions from the Crusher and Grizzley units at all times that the portable concrete and asphalt crushing and screening system are in operation. The water spray and dust control agent system for the stock piles shall be available for operation and control of emissions from the stock piles as needed.

D.1.9 Visible Emission Notations

(a) Visible emission notations of the concrete and asphalt crushing and screening operation and the storage piles shall be performed once per shift during normal daylight operations. A trained employee shall record whether emissions are normal or abnormal.

(b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.

(c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.

(d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.

(e) The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed.

Record Keeping and Reporting Requirements

D.1.10 Record Keeping Requirements

The Permittee shall keep throughput records of the concrete and asphalt operation at the site for the previous twelve (12) months on a monthly rolling total. These records shall be maintained for a minimum period of five (5) years, and made available, upon request, to the Office of Air Quality (OAQ).

D.1.11 Reporting requirements

Any exceedance of any requirements contained in this operating agreement shall be reported, in

writing, within one (1) week of its occurrence.

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY COMPLIANCE BRANCH
MINOR SOURCE OPERATING PERMIT
ANNUAL NOTIFICATION

This form should be used to comply with the notification requirements under 326 IAC 2-6.1-5(a)(5).

Company Name:	Pyramid Excavation and Construction, Inc.
Address:	501 North Keyser Drive
City:	Bremen, Indiana 46506
Phone #:	574-546-5176
MSOP #:	099-17158-05235

I hereby certify that Pyramid Excavation and Construction, Inc. is **9** still in operation.
9 no longer in operation.

I hereby certify that is Pyramid Excavation and Construction, Inc **9** in compliance with the requirements of MSOP 099-17158-05235.
9 not in compliance with the requirements of MSOP 099-17158-05235.

Authorized Individual (typed):
Title:
Signature:
Date:

If there are any conditions or requirements for which the source is not in compliance, provide a narrative description of how the source did or will achieve compliance and the date compliance was, or will be achieved.

Noncompliance:

MALFUNCTION REPORT

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
FAX NUMBER - 317 233-5967

This form should only be used to report malfunctions applicable to Rule 326 IAC 1-6 and to qualify for the exemption under 326 IAC 1-6-4.

THIS FACILITY MEETS THE APPLICABILITY REQUIREMENTS BECAUSE IT HAS POTENTIAL TO EMIT 25 TONS/YEAR PARTICULATE MATTER ?_____, 25 TONS/YEAR SULFUR DIOXIDE ?_____, 25 TONS/YEAR NITROGEN OXIDES?_____, 25 TONS/YEAR VOC ?_____, 25 TONS/YEAR HYDROGEN SULFIDE ?_____, 25 TONS/YEAR TOTAL REDUCED SULFUR ?_____, 25 TONS/YEAR REDUCED SULFUR COMPOUNDS ?_____, 25 TONS/YEAR FLUORIDES ?_____, 100TONS/YEAR CARBON MONOXIDE ?_____, 10 TONS/YEAR ANY SINGLE HAZARDOUS AIR POLLUTANT ?_____, 25 TONS/YEAR ANY COMBINATION HAZARDOUS AIR POLLUTANT ?_____, 1 TON/YEAR LEAD OR LEAD COMPOUNDS MEASURED AS ELEMENTAL LEAD ?_____, OR IS A SOURCE LISTED UNDER 326 IAC 2-5.1-3(2) ?_____. EMISSIONS FROM MALFUNCTIONING CONTROL EQUIPMENT OR PROCESS EQUIPMENT CAUSED EMISSIONS IN EXCESS OF APPLICABLE LIMITATION _____.

THIS MALFUNCTION RESULTED IN A VIOLATION OF: 326 IAC _____ OR, PERMIT CONDITION # _____ AND/OR PERMIT LIMIT OF _____

THIS INCIDENT MEETS THE DEFINITION OF 'MALFUNCTION' AS LISTED ON REVERSE SIDE ? Y N

THIS MALFUNCTION IS OR WILL BE LONGER THAN THE ONE (1) HOUR REPORTING REQUIREMENT ? Y N

COMPANY:_____PHONE NO. ( )_____

LOCATION: (CITY AND COUNTY)_____

PERMIT NO. _____ AFS PLANT ID: _____ AFS POINT ID: _____ INSP:_____

CONTROL/PROCESS DEVICE WHICH MALFUNCTIONED AND REASON:_____

_____

DATE/TIME MALFUNCTION STARTED: _____/_____/ 20____ _____ AM / PM

ESTIMATED HOURS OF OPERATION WITH MALFUNCTION CONDITION: _____

DATE/TIME CONTROL EQUIPMENT BACK-IN SERVICE_____/_____/ 20____ _____ AM/PM

TYPE OF POLLUTANTS EMITTED: TSP, PM-10, SO2, VOC, OTHER:_____

ESTIMATED AMOUNT OF POLLUTANT EMITTED DURING MALFUNCTION: _____

_____

MEASURES TAKEN TO MINIMIZE EMISSIONS:_____

_____

REASONS WHY FACILITY CANNOT BE SHUTDOWN DURING REPAIRS:

CONTINUED OPERATION REQUIRED TO PROVIDE ESSENTIAL* SERVICES:_____
CONTINUED OPERATION NECESSARY TO PREVENT INJURY TO PERSONS:_____
CONTINUED OPERATION NECESSARY TO PREVENT SEVERE DAMAGE TO EQUIPMENT:_____
INTERIM CONTROL MEASURES: (IF APPLICABLE)_____

MALFUNCTION REPORTED BY:_____TITLE:_____
(SIGNATURE IF FAXED)

MALFUNCTION RECORDED BY:_____DATE:_____TIME:_____

EE PAGE 2

Please note - This form should only be used to report malfunctions applicable to Rule 326 IAC 1-6 and to qualify for the exemption under 326 IAC 1-6-4.

326 IAC 1-6-1 Applicability of rule

Sec. 1. This rule applies to the owner or operator of any facility required to obtain a permit under 326 IAC 2-5.1 or 326 IAC 2-6.1.

326 IAC 1-2-39 "Malfunction" definition

Sec. 39. Any sudden, unavoidable failure of any air pollution control equipment, process, or combustion or process equipment to operate in a normal and usual manner.

***Essential services** are interpreted to mean those operations, such as, the providing of electricity by power plants. Continued operation solely for the economic benefit of the owner or operator shall not be sufficient reason why a facility cannot be shutdown during a control equipment shutdown.

If this item is checked on the front, please explain rationale:

_____

_____

Indiana Department of Environmental Management
Office of Air Quality

Technical Support Document (TSD) for a Minor Source Operating Permit

Source Background and Description

Source Name:	Pyramid Excavation and Construction, Inc.
Source Location:	501 North Keyser Drive, Bremen, IN 46506
County:	Marshall
SIC Code:	1611
Operation Permit No.:	099- 17158-05235
Permit Reviewer:	Walter Habeeb

The Office of Air Quality (OAQ) has reviewed an application from Pyramid Excavation and Construction, Inc. relating to the construction and operation of a portable crusher and screening facility for crushing used concrete and asphalt.

Unpermitted Emission Units and Pollution Control Equipment

The source also consists of the following unpermitted facilities/units:

(a) One (1) Pegson Crusher Unit for asphalt and concrete crushing including one (1) Hopper/Shaker, one (1) Crusher and one (1) Grizzley. identified as C-1, with a maximum capacity of 200 tons per hour, using water spray as control.

(b) One (1) Powerscreen Screen Unit for asphalt and concrete screening including three (3) Shaker Screens numbers 1, 2 and 3 each with a 1.5 inch mesh screen.

(c) One (1) Unfragmented concrete and one (1) unfragmented asphalt outside storage pile of 5,000 tons each.

(d) Two (2) 0.572 MMBtu per hour diesel fueled engines for a total of 1.144 MMBtu per hour.

Air Pollution Control Justification as an Integral Part of the Process

The company has submitted the following justification such that the water spray system for the Pegson Crusher and Grizzley unit be considered as an integral part of the process:

(a) Dust is controlled by a water spray system for the Pegson Crusher and the Grizzley unit as it transfers crushed material to the Powerscreen unit conveyor.

(b) Stock piles are not covered but are wetted with water or dust control agents as needed.

IDEM, OAQ has evaluated the justifications and determined that the water spray and wetting systems will not be considered as an integral part of the process.

Pollution control equipment can be considered as an integral part of the equipment only if it meets one of the following three criteria. The criteria are:

1. The process can not operate without the control equipment,
2. The control equipment serves a primary purpose other than pollution control, or
3. The control equipment has an overwhelming positive net economic effect.

The wet suppression controls do not meet any of the above criteria. Therefore, the permitting level will be determined using the potential to emit before the water spray units.

Enforcement Issue

(a) IDEM is aware that equipment has been constructed and operated prior to receipt of the proper permit. The subject equipment is listed in this Technical Support Document under the condition entitled Unpermitted Emission Units and Pollution Control Equipment.

(b) IDEM is reviewing this matter and will take appropriate action. This proposed permit is intended to satisfy the requirements of the construction permit rules.

Recommendation

The staff recommends to the Commissioner that the construction and operation be approved. This recommendation is based on the following facts and conditions:

Unless otherwise stated, information used in this review was derived from the application and additional information submitted by the applicant.

An application for the purposes of this review was received on April 10, 2003, with additional information received on May 2, 2003.

Emission Calculations

See Appendix A of this document for detailed emissions calculations (pages 1 through 3).

Potential To Emit

Pursuant to 326 IAC 2-1.1-1(16), Potential to Emit is defined as "the maximum capacity of a stationary source or emissions unit to emit any air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of a source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or type or amount of material combusted, stored, or processed shall be treated as part of its design if the limitation is enforceable by the U. S. EPA, the department, or the appropriate local air pollution control agency."

Pollutant	Potential To Emit (tons/year)
PM	1.55
PM-10	45.08
SO_2	1.45
VOC	1.80
CO	4.76
NO_x	22.1

(a) Fugitive Emissions
Since this type of operation is not one of the twenty-eight (28) listed source categories under 326 IAC 2-2 and since there are no applicable New Source Performance Standards that were in effect on August 7, 1980, the fugitive particulate matter (PM) is not counted toward determination of PSD and Emission Offset applicability.

Actual Emissions

No previous emission data has been received from the source.

County Attainment Status

The source is located in Marshall County.

Pollutant	Status
PM-10	attainment
SO_2	attainment
NO_2	attainment
Ozone	attainment
CO	attainment
Lead	attainment

Portable Source

(a) This is a portable source and its initial location is 402 North Liberity Street, Bremen, IN 46506.

(b) PSD and Emission Offset Requirements
The emissions from this portable source were reviewed under the requirements of the Prevention of Significant Deterioration (PSD), 326 IAC 2-2, and Emission Offset, 326 IAC 2-3.

Source Status

New Source PSD Definition (emissions after controls, based on 8,760 hours of operation per year at rated capacity and/ or as otherwise limited):

Pollutant	Emissions (ton/yr)
PM	1.55
PM10	6.17
SO_2	1.45
VOC	1.80
CO	4.76
NOx	22.1

(a) This new source is not a major source because no attainment pollutant is emitted at a rate of 250 tons per year or greater and it is not in one of the 28 listed source categories. Therefore, pursuant to 326 IAC 2-2, and 40 CFR 52.21, the PSD requirements do not apply.

Part 70 Permit Determination

326 IAC 2-7 (Part 70 Permit Program)
This new source is not subject to the Part 70 Permit requirements because the potential to emit (PTE) of:
(a) each criteria pollutant is less than 100 tons per year,
(b) a single hazardous air pollutant (HAP) is less than 10 tons per year, and
(c) any combination of HAPs is less than 25 tons/year.

This is the first air approval issued to this source.

Federal Rule Applicability

326 IAC 12 (New Source Performance Standard)

This concrete and asphalt crushing plant is subject to the New Source Performance Standard 326 IAC 12, 40 CFR 60.670 through 60.676, Subpart OOO. This rule requires the particulate emissions from:

(a) the crushing operations to be limited to fifteen percent (15%) opacity or less, and

(b) the screening and conveying operations to be limited to ten percent (10%) or less.

326 IAC 14 (National Emission Standards for Hazardous Air Pollutants)

There are no National Emission Standards for Hazardous Air Pollutants (NESHAPs)(326 IAC 14 and 40 CFR part 63) applicable to this source.

State Rule Applicability - Entire Source

326 IAC 2-6 (Emission Reporting)

This source is located in Marshall county and the potential to emit NO_X is less than one-hundred (100) tons per year. The source is not one of the twenty-eight (28) listed sources and its potential to emit PM_{10} is less than one-hundred (100) tons per year including fugitive emissions, therefore, 326 IAC 2-6 does not apply.

The source will be required to annually submit a statement of the actual emissions of all federally regulated pollutants from the source, for the purpose of fee assessment.

326 IAC 5-1 (Opacity Limitations)

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Alternative Opacity Limitations), opacity shall meet the following, unless otherwise stated in this permit:

(a) Opacity shall not exceed an average of forty percent (40%) any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.

(b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings) as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

326 IAC 6-5 (Fugitive Particulate Matter Emission Limitations)

Fugitive particulate matter emissions shall be controlled according to the plan submitted on February 11, 1998. This plan consists of:

(a) applying water to plant operations on an as-needed basis,
(b) applying water and chloride to unpaved roads on an as-needed basis, and
(c) flushing and sweeping paved roads on an as-needed basis.

State Rule Applicability - Individual Facilities

326 IAC 6-3-2 (Process Operations)

The particulate matter (PM) from this concrete and asphalt crushing plant shall be limited by the following:

Interpolation and extrapolation of the data for the process weight rate in excess of sixty

thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$E = 55.0 P^{0.11} - 40$ where E = rate of emission in pounds per hour and
P = process weight rate in tons per hour

The water spray system for the crushing and screening process shall be in operation at all times the concrete and asphalt crushing plant is in operation, in order to comply with this limit.

Conclusion

The construction and operation of this concrete and asphalt crushing plant shall be subject to the conditions of the attached proposed New Source Construction and Minor Source Operating Permit 099-17158-05235.

Appendix A: Emission Calculations

Company Name:	Pyramid Excavation and Construction, Inc.
Mailing Address :	402 North Liberty Street, Bremen, In 46506
Location Address:	501 North Keyser Drive, Bremen, IN 46506
MSOP :	099-17158
Plt ID:	099-05235
Reviewer:	Walter Habeeb
Date:	May 12, 2003

Emissions from Crushed Stone Processing (no controls)

Particulate emissions factors from this facility are based on AP-42, Table 11.19.2-2 Emission Factors for Crushed Stone Processing Operations (no emissions controls). The calculations are based upon 200 tons per hour of unfragmented concrete/asphalt and use PM_{10} factors where available.

1. Loading Unfragmented Aggregate into Hopper/Shaker (emission factor = 0.000016 lb/ton)
   (0.000016 lb/ton)(200ton/hr)(1 ton/2000 lb)(8760 hr/yr) = 0.014 TPY

2. Primary Crusher Operation (emission factor = 0.0007 lb/ton)
   (0.0007 lb/ton)(200ton/hr)(1 ton/2000 lb)(8760 hr/yr) = 0.6132 TPY

3. Transfer of Material by Grizzley to Screens (emission factor = 0.0014 lb/ton)
   (0.0014 lb/ton)(200ton/hr)(1 ton/2000 lb)(8760 hr/yr) = 1.2264 TPY

4. Screen #1 with 1.5" mesh (emission factor = 0.015 lb/ton)
   (0.015 lb/ton)(200ton/hr)(1 ton/2000 lb)(8760 hr/yr) = 13.14 TPY

5. Screen #2 with 1.5" mesh (emission factor = 0.015 lb/ton)
   (0.015 lb/ton)(200ton/hr)(1 ton/2000 lb)(8760 hr/yr) = 13.14 TPY

6. Screen #3 with 1.5" mesh (emission factor = 0.015 lb/ton)
   (0.015 lb/ton)(200ton/hr)(1 ton/2000 lb)(8760 hr/yr) = 13.14 TPY

Total PM_{10} from Crushed Stone Operations = **41.59 TPY**

Storage Emissions

Storage emissions, which result from wind erosion, are determined by the following calculations:

Ef = 1.7*(s/1.5)*(365-p)/235*(f/15)
= 1.85 lb/acre/day
where s = 1.6 % silt content of material
p = 125 days of rain greater than or equal to 0.01 inches
f = 15 % of wind greater than or equal to 12 mph

Ep (storage) = Ef*sc*(40 cuft/ton)/(2000 lb/ton)/(43560 sqft/acre)/(25 ft)*(365 day/yr)
= **0.06 TPY**
where sc = 5,000 tons storage capacity

Emissions from Diesel Engines Used to Power Equipment

Emissions factors from the diesel engines are based on AP-42, Table 3.3-1 Emission Factors for Uncontrolled Gasoline and Diesel Industrial Engines. The calculations are based upon a heat input of 0.572 MMBtu per hour for each engine for a total of 1.144 MMBtu per hour using diesel fuel.

NOx - (emission factor = 4.41 lb/MMBtu)
(4.41 lb/MMBtu)(1.144 MMBtu/hr)(1 ton/2000 lb)(8760 hr/yr) = 22.097 TPY

CO - (emission factor = 0.95 lb/MMBtu)
(0.95 lb/MMBtu)(1.144 MMBtu/hr)(1 ton/2000 lb)(8760 hr/yr) = 4.76 TPY

SOx - (emission factor = 0.29 lb/MMBtu)
(0.29 lb/MMBtu)(1.144 MMBtu/hr)(1 ton/2000 lb)(8760 hr/yr) = 1.45 TPY

PM_{10} - (emission factor = 0.31 lb/MMBtu)
(0.31 lb/MMBtu)(1.144 MMBtu/hr)(1 ton/2000 lb)(8760 hr/yr) = 1.55 TPY

PM - (emission factor = 0.31 lb/MMBtu)
(0.31 lb/MMBtu)(1.144 MMBtu/hr)(1 ton/2000 lb)(8760 hr/yr) = 1.55 TPY

Volatile Organic Compound - (emission factor = 0.29 lb/MMBtu)
(0.36 lb/MMBtu)(1.144 MMBtu/hr)(1 ton/2000 lb)(8760 hr/yr) = 1.80 TPY

Emissions from Unpaved Roads

The following calculations determine the amount of emissions created by unpaved roads using AP-42, Chapter 13.2.2.

Ef =	{k*[(s/12)^0.8]*[(W/3)^b]/[(Mdry/0.2)^c]}*[(365-p)/365]	
=	0.29	lb/mile
where k =	2.6	(particle size multiplier for PM-10)
s =	1	mean % silt content of unpaved roads
b =	0.4	Constant for PM-10
c =	0.3	Constant for PM-10
W =	17	tons average vehicle weight
Mdry =	1.0	surface material moisture content, %
p =	125	number of days with at least 0.254mm of precipitation (See Fig.13.2.2-1)

$$Ef = \frac{0.29 \text{lb/mi} \times 13140 \text{ mi/yr}}{2000 \text{ lb/ton}} = \mathbf{1.88\ TPY}$$

Total PM_{10} Emissions From All Operations = 41.59 + 0.06 + 1.55 + 1.88 **= 45.08 TPY (No Controls)**

Emissions from Crushed Stone Processing (with controls)

Particulate emissions factors from this facility are based on AP-42, Table 11.19.2-2 Emission Factors for Crushed Stone Processing Operations (with emissions controls). The calculations are based upon 200 tons per hour of unfragmented concrete/asphalt and use PM_{10} factors where available.

1. Loading Unfragmented Aggregate into Hopper/Shaker (emission factor = 0.000016 lb/ton)
   (0.000016 lb/ton)(200ton/hr)(1 ton/2000 lb)(8760 hr/yr) = 0.0140 TPY

2. Primary Crusher Operation (emission factor = 0.00059 lb/ton)
   (0.00059 lb/ton)(200ton/hr)(1 ton/2000 lb)(8760 hr/yr) = 0.5168 TPY

3. Transfer of Material by Grizzley to Screens (emission factor = 0.00048 lb/ton)
   (0.000048 lb/ton)(200ton/hr)(1 ton/2000 lb)(8760 hr/yr) = 0.0420 TPY

4. Screen #1 with 1.5" mesh (emission factor = 0.00084 lb/ton)
   (0.00084 lb/ton)(200ton/hr)(1 ton/2000 lb)(8760 hr/yr) = 0.7358 TPY

5. Screen #2 with 1.5" mesh (emission factor = 0.00084 lb/ton)
   (0.00084 lb/ton)(200ton/hr)(1 ton/2000 lb)(8760 hr/yr) = 0.7358 TPY

6. Screen #3 with 1.5" mesh (emission factor = 0.00084 lb/ton)
   (0.00084 lb/ton)(200ton/hr)(1 ton/2000 lb)(8760 hr/yr) = 0.7358 TPY

Total PM_{10} from Crushed Stone Operations = **2.78 TPY**

Total PM_{10} Emissions From All Operations = 2.78 + 0.06 + 1.55 + 1.88 = **6.27 TPY (with controls)**

Appendix A: Emission Calculations
Internal Combustion Engines - Diesel Fuel
Turbine (>250 and <600 HP)
Reciprocating

Company Name: **Pyramid Excavation and Construction, Inc.**
Address City IN Zip: **402 N. Liberity Street, Bremen, IN 46506**
CP#: **[099-17158]**
Plt ID: **[099-05235]**
Reviewer: **Walter Habeeb**
Date: **May 16, 2003**

A. Emissions calculated based on heat input capacity (MMBtu/hr)

Heat Input Capacity
MM Btu/hr

1.1

	Pollutant					
	PM*	PM10*	SO2	NOx	VOC	CO
Emission Factor in lb/MMBtu	0.31	0.31	0.29	4.41	0.4	0.95
Potential Emission in tons/yr	1.6	1.6	1.5	22.1	1.8	4.8

B. Emissions calculated based on output rating (hp)

Heat Input Capacity
Horsepower (hp)

0.0

Potential Throughput
hp-hr/yr

0.0

	Pollutant					
	PM*	PM10*	SO2	NOx	VOC	CO
Emission Factor in lb/hp-hr	0.0022	0.0022	0.0021	0.0310	0.0025	0.0067
Potential Emission in tons/yr	0.0	0.0	0.0	0.0	0.0	0.0

Methodology

Potential Througput (hp-hr/yr) = hp * 8760 hr/yr

Use a conversion factor of 7,000 Btu per hp-hr to convert from horsepower to Btu/hr, unless the source gives you a source-specific brake-specific fuel consumption. (AP-42, Footnote a, Table 3.3-1)

Emission Factors are from AP42 (Supplement B 10/96), Table 3.3-2

Emission (tons/yr) = [Heat input rate (MMBtu/hr) x Emission Factor (lb/MMBtu)] * 8760 hr/yr / (2,000 lb/ton)

Emission (tons/yr) = [Potential Throughput (hp-/hr/yr) x Emission Factor (lb/hp-hr)] / (2,000 lb/ton)

*PM emission factors are assumed to be equivalent to PM10 emission factors. No information was given regarding which method was used to determine the factor or the fraction of PM10 which is condensable.

Note: Check the applicable rules and test methods for PM and PM10 when using the above emission factors to confirm that the correct factor is used (i.e., condensable included/not included).